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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/664,682	09/19/2000	Suguru Mitsui	450100-02722	8097

20999 7590 04/06/2004

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EXAMINER

HAN, QI

ART UNIT	PAPER NUMBER
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2654

DATE MAILED: 04/06/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/664,682

Applicant(s)

MITSUI, SUGURU

Examiner

Qi Han

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

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## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 5, 7, 9, 11, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over White (US 5,734,794) in view of Ozzimo et al. (US 6,003,000), hereinafter referenced Ozzimo, and further in view of Gibson (US 6,490,359 B1).

As per **claims 1 and 5**, White discloses a computer based system utilizing cues extracted from audio speech to select from among a database of stored image cells to produce synthesized animated characters (abstract), comprising:

sound signal obtaining means for obtaining a sound signal (Fig. 2, 'microphone', 'A/D converter');

sound signal analyzing means for frequency-analyzing said obtained sound signal (Fig. 2 and column 6, lines 5-21, 'audio tools', 'extraction tools 240'; column 8, lines 24-55, 'the speech (sound signal) is analyzed with respect to frequency and amplitude);

storing means for storing a plurality of pictures (Fig. 4 and column 7, lines 10-16, 'frame memory 216 which is the initial image storage location', 'a cell (image) database 212') (for claim 5);

selected picture switching means that switches and selects one among a plurality of registered pictures as a selected picture on the basis of a level of said obtained sound signal (Fig. 2 and column 6, lines 5-21, 'image tools 220', 'cell selector 250' used to receive phoneme and emotion information from extraction tools 240, and 'to select appropriate image cell (herein corresponding to picture) from the image tools memory 220'); and

composed picture display means that displays a composed picture produced by composing the selected pictures (column 5, lines 32-34, 'the animated faces of the virtual actors can be composited (composed) onto the faces of the body actors').

Even though White suggests that the speech is frequency-analyzed by using spectral components, including frequency and amplitude (column 8, lines 24-55), White fails to disclose using the analyzed result to produce a corresponding picture as the claimed "frequency-analyzed picture producing means for producing a specified frequency-analyzed picture on the basis of a result of said frequency-analysis". However, this feature is well known in the art as evidenced by Ozzimo who discloses an AR model for creating (producing) a linear image of the voice's spectrum (herein equivalent to frequency-analyzed picture) (Fig.3 and column 4, lines 11-16). Therefore, it would have been obvious to one of ordinary skill in the art at time the invention was

made to modify White by specifically providing a mechanism to produce a frequency-analyzed picture based on a voice (sound), as taught by Ozzimo, for the purpose of offering a intuitive way for showing a analyzed result.

Further, even though White discloses capability of composing selected pictures (column 5, lines 32-34), as stated above, White in view of Ozzimo does not expressly discloses “a composed picture produced by composing said frequency-analyzed picture and said selected picture”. However, this feature is well known in the art as evidenced by Gibson who discloses a method and apparatus for using visual images to mix sound (title), comprising transforming each audio signal into an audio signal visual image (herein may correspond to a selected picture) for displaying on a video display monitor, generating audio effect images (herein may include a frequency-analyzed picture), and adjusting the displayed audio effect images (herein may correspond to a composed picture) (Figs. 6-16 and column 2, line 31 through column 3, line 30), and providing with a choice of three windows or visual scenes in which visual mixing (composing) activities may take place, including “mix window” (also may correspond to a composed picture in the display), “effects window” and “EQ window” (column 5, lines 58-64). Therefore, it would have been obvious to one of ordinary skill in the art at time the invention was made to modify White in view of Ozzimo by specifically providing a mixing (composing) mechanism for composing a frequency-analyzed picture and a selected picture, as taught by Gibson, for the purpose of presenting the intuitive special characteristics of sound with visuals (Gibson: column 2, lines 14-16).

As per **claim 3** (depending on claim 1), White in view of Ozzimo in view of Gibson further discloses that said composed picture display means changes a composing method of said

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frequency-analyzed picture and said selected picture on the basis of a level of said obtained sound signal, (White: column 7, lines 7-45, 'image tools' and 'cell database', in which the system can change the composing method by using face shape with mouth, emotion, camera angle, or combination of the three; Gibson: column 5, line 60 to column 10, line 67, 'visual mixing activities' by using 'mix window', 'effect window', 'EQ widow' in variety of combining (composing) methods).

As per **claim 7** (depending on claim 5), the rejection is based on the same reason described for claim 3, because claim 7 recites same or similar limitation(s) as claim 3.

As per **claim 9**, it recites a picture producing method. The rejection is based on the same reason described for claim 1, because claim 9 recites same or similar limitation(s) as claim 1.

As per **claim 11** (depending on claim 9), the rejection is based on the same reason described for claim 3, because claim 11 recites same or similar limitation(s) as claim 3.

As per **claim 13**, it recites a program-storing medium. The rejection is based on the same reason described for claim 1, because claim 13 recites same or similar limitation(s) as claim 1.

As per **claim 15** (depending on claim 13), the rejection is based on the same reason described for claim 3, because claim 15 recites same or similar limitation(s) as claim 3.

3. Claims 2, 4, 6, 8, 10, 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over White in view of Ozzimo in view of Gibson, and further in view of well known prior art (MPEP 2144.03).

As per **claim 2** (depending on claim 1), White in view of Ozzimo in view of Gibson fails to specifically disclose that "said composed picture display means produces said composed

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picture by **logically operating** a picture element of said frequency-analyzed picture and a corresponding picture element of said selected picture". However, an official notice is taken that it is well known in the art to provide logical operation(s) on a picture (or image) element for composing two pictures. Therefore, it would have been obvious to one of ordinary skill in the art at time the invention was made to modify White in view of Ozzimo in view of Gibson by specifically providing provide logical operation(s), such as OR and AND, on a picture element for composing two pictures, for the purpose of offering more data manipulating feature(s) for a visual display.

As per **claim 4** (depending on claim 2), the rejection is based on the same reason described for claim 3, because claim 4 recites same or similar limitation(s) as claim 3.

As per **claim 6** (depending on claim 5), the rejection is based on the same reason described for claim 2, because claim 6 recites same or similar limitation(s) as claim 2.

As per **claim 8** (depending on claim 6), the rejection is based on the same reason described for claim 4, because claim 8 recites same or similar limitation(s) as claim 4.

As per **claim 10** (depending on claim 9), the rejection is based on the same reason described for claim 2, because claim 10 recites same or similar limitation(s) as claim 2.

As per **claim 12** (depending on claim 10), the rejection is based on the same reason described for claim 4, because claim 12 recites same or similar limitation(s) as claim 4.

As per **claim 14** (depending on claim 13), the rejection is based on the same reason described for claim 2, because claim 14 recites same or similar limitation(s) as claim 2.

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***Conclusion***

4. Any response to this office action should be mailed to:  
Commissioner of Patents and Trademarks, P.O. Box 1450, Alexandria, VA22313-1450  
or faxed to:  
(703)-872-9314  
Hand-delivered responses should be brought to:  
Crystal Park II, 2121 Crystal Drive, Arlington. VA. Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I Han whose telephone numbers is (703) 305-5631. The examiner can normally be reached on Monday through Thursday from 9:00 a.m. to 7: p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richmond Devil, can be reached on (703) 305-6954.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

QH/qi  
April 1, 2004

  
**RICHEMOND DORVIL**  
**SUPERVISORY PATENT EXAMINER**